Poliomintha incana / (Pleuraphis jamesii) Shrubland

MAP CLASS Frosted Mint Shrubland

COMMON NAME Hoary Rosemary-mint / (Galleta) Shrubland

PHYSIOGNOMIC CLASS Shrubland (III)

PHYSIOGNOMIC SUBCLASS Evergreen shrubland (III.A)

PHYSIOGNOMIC GROUP Extremely xeromorphic evergreen shrubland (III.A.5)

PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (III.A.5.N)

FORMATION Broad-leaved and microphyllous evergreen extremely xeromorphic

subdesert shrubland (III.A.5.N.a)

ALLIANCE Poliomintha incana Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL Weak

USFS WETLAND SYSTEM Upland

RANGE

Wupatki National Monument

Hoary Rosemary-mint / (Galleta) Shrubland is a common association occurring in the eastern section of the project boundary in sand dunes at Wupatki NM and the environs. This association was located from the relevé data on Wupatki NM south of Tse Lichii Point, west of the Little Colorado River, and north of Deadman's wash. On the USDA-FS it was located east Highway 89 adjacent to the Tuba City Road Tank and near Kish Zhini wash.

ENVIRONMENTAL DESCRIPTION

Wupatki National Monument

Based on six relevés, this association was found from low to high elevations, 4,236-6,178 ft (1,291-1,883 m) (average 4,364 ft/1,330 m). It occurs on flat land to steep slopes ranging from 0-27% (average 14%). This association occurs on sand dunes with sandy soils that can be intermixed with clay, riverine cobbles, and cinders.

MOST ABUNDANT SPECIES **Wupatki National Monument**

<u>Stratum</u> <u>Species</u>

Shrub Poliomintha incana Herbaceous Pleuraphis jamesii

ASSOCIATED SPECIES

Wupatki National Monument

Achnatherum hymenoides, Alhagi maurorum, Artemisia filifolia, Atriplex canescens, Bouteloua eriopoda, Dasyochloa pulchella, Ephedra torreyana, Ericameria nauseosa, Gutierrezia sarothrae, Isocoma drummondii, Isocoma pluriflora, Parryella filifolia, Psorothamnus thompsoniae var. whitingii, Sporobolus airoides, Sporobolus flexuosus, Tiquilia latior, Yucca angustissima

VEGETATION DESCRIPTION

Wupatki National Monument

Hoary Rosemary-mint / (Galleta) Shrubland total vegetation cover ranges from 10-45% (average 28%) with 9-22% (average 15%) absolute cover in the shrub layer and 2-30% (average 12%) absolute cover in the herbaceous layer. The total species diversity ranged from 11-21 species (average 15) within the 6 relevés sampled.

The indicator shrub for this association, *Poliomintha incana*, ranges from 2-6% absolute cover (average 3%). *Gutierrezia sarothrae* consistently occurred in our relevés and ranged in cover from 1-4% (average 2%). Dominant shrub species may include: *Artemisia filifolia*, *Ephedra torreyana*, *Isocoma pluriflora*, and *Psorothamnus thompsoniae* var. *whitingii*. The herbaceous layer's most consistent species is *Pleuraphis jamesii*; however, it was not present in all of our relevés and ranged in cover from 0-7% (average 2%).

CONSERVATION RANK G?

USGS-NPS Vegetation Mapping Program Wupatki National Monument

DATABASE CODE CEGL002930

MAP CLASSES

The association Hoary Rosemary-mint / (Galleta) Shrubland is represented by map class Frosted Mint Shrubland (map code 22).

The total area mapped within Wupatki NM is 220 ac (89 ha) within 8 polygons and the total area in the park environs is 10 ac (4 ha) within 1 polygon.

COMMENTS

Wupatki National Monument

Poliomintha incana is an indicator for Hoary Rosemary-mint / (Galleta) Shrubland at Wupatki NM; however, other shrubs may be dominant. The understory species, *Pleuraphis jamesii*, was selected as occurring most consistently within the relevés; however, other understory species may also dominate the association. The classification of this association may need to be reviewed with additional data.